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Tayloe Murphy Institute

Virginia Gross State Product, 1958-1979

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This report presents provisional estimates of Virginia's gross state product (GSP) for 1979 and revisions for 1977 and 1978, plus previously published estimates for the years 1958 to 1976. Derivation of the 1979 estimates was accomplished by a variation of previous methodology to compensate for certain national income estimates not published in 1980. Revisions for 1977 and 1978 were made necessary by changes in personal income and farm income estimates as provided by federal agencies.

Gross state product is an estimate of the value of all goods and services produced in the state in one year. For purposes of comparison, GSP may be regarded as the state equivalent of gross national product (GNP). The figures in this report supersede those published in earlier reports of the Tayloe Murphy Institute. The special derivation of farm product is described below. A statement of the complete methodology is available on request.

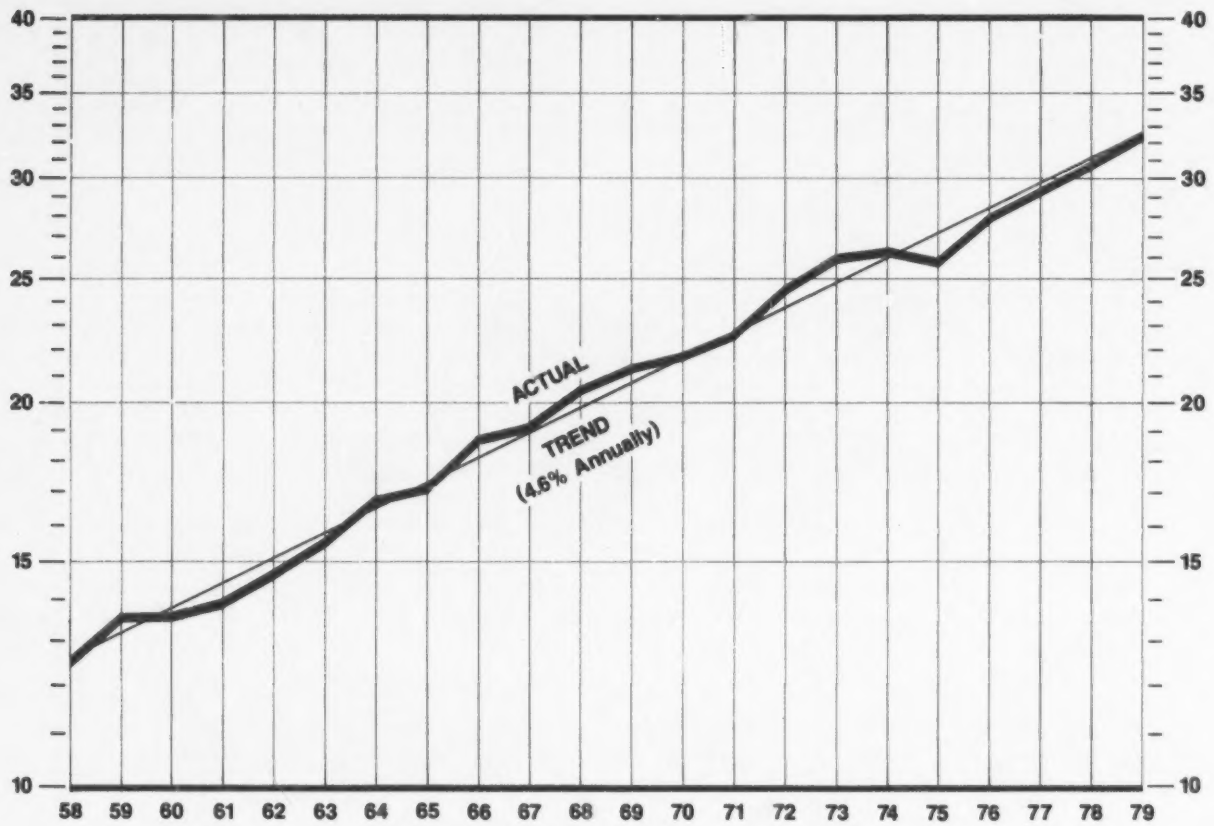
In dollars unadjusted for inflation, Virginia GSP rose from $8.0 billion in 1958 to $51.4 billion in 1979 (see Table 1). Average annual growth over the period was 9.3 percent.

Real Virginia GSP (gross state product converted to 1972 dollars of constant purchasing power) grew from $12.5 billion in 1958 to $31.5 billion in 1979 (see Table 2 and Figure 1). Average annual growth over the entire period was 4.6 percent. The only decline in real GSP over the twenty-one year period, a drop of 1.5 percent from 1974 to 1975, occurred at the time of a severe national recession. When the twenty-one year period is broken down into seven-year intervals, it can be seen that both GSP and GNP grew more slowly in the most recent period. GSP grew at a consistently higher rate than GNP over the total period. The disparity between Virginia's real growth rate and that of the nation widened in the middle period but narrowed somewhat in the latest seven-year period.

	Average Annual Change (%)		
	Virginia Real GSP	Real GNP	Ratio of Real GSP to Real GNP
1958-65	4.6	4.5	1.02:1
1965-72	5.2	3.4	1.53:1
1972-79	3.6	2.9	1.24:1

January 1981

Figure 1.
Virginia Gross State Product, 1958-1979 (billions of 1972 dollars)



Among industrial components of real Virginia GSP, manufacturing rose from 18.7 percent of the total in 1958 to 21.5 percent in 1979; trade from 13.5 percent to 15.2 percent; finance, insurance, and real estate from 9.5 percent to 13.2 percent; transportation and public utilities from 8.0 percent to 9.2 percent; and services and other industries from 11.3 percent to 12.8 percent. The industrial sectors that decreased their shares of real GSP over the same period were mining (1.4 to 1.2 percent), construction (6.1 to 4.7 percent), government (27.4 to 20.6 percent), and farming (4.0 to 1.4 percent).

Both construction and government grew over the twenty-one year period. As shares of the total, however, both declined rather consistently, with some small annual increase in share in the middle years of the period. The principal reason for the drop in government's share was the decrease in military personnel stationed in Virginia and the slow growth of federal civilian employment.

As measured by Virginia GSP, all industrial sectors except farming were larger percentages of their GNP counterparts in 1979 than in 1958. Table 3 presents Virginia GSP (current dollar) industrial components as percentages of their GNP counterparts, 1958 to 1979.

Virginia GSP per capita (current dollars) grew from $2,051 in 1958 to $9,896 in 1979, while current dollar GNP per capita grew from $2,578 to $10,763 (see Table 4). Virginia GSP per capita as a percent of GNP per capita (both current dollar and real) was in the low 80's until the middle of the twenty-one year period and stood in the low 90's for the last eight years of the period.

Gross farm product, a component of Virginia gross state product, is derived from the U.S. Department of Agriculture's state farm income statistics for Virginia. The concept of gross farm product is different from realized gross farm income and is different also from realized net farm income. The intermediate figures "value of total farm output" and "intermediate production expenses" are composed of specially selected statistics for consistency with the composition of GNP. Government payments are omitted from the income side and hired farm labor is omitted from the expenditures side--in other words farm wages are included in the gross product figure. The following table illustrates the computation of Virginia gross farm product for 1979 (current dollars).

	Millions of Dollars
Value of total farm output	
Cash receipts from marketings	1,347.6
Nonmonetary income	234.3
Other farm income	25.9
Net rent to nonoperating landlords	(27.3)
Net change in inventories	101.5
Subtotal	1,682.0
Intermediate production expenses	
Feed	225.8
Livestock purchased	48.5
Seed, plants, and bulbs	38.2
Fertilizer and lime	103.4
Repairs and operation of capital items	203.4
Miscellaneous operating expenses	234.7
Subtotal	854.0
Gross farm product	828.0

Table 1.
Virginia Gross State Product in Current Dollars, 1958 - 1979 (millions of current dollars)

	Mining	Construction	Mfg.	Trade	Finance, Insurance, & Real Estate	Trans. & Public Utilities	Services & Other Industries a/	Gov't	Farming	Total
1958	164.7	373.6	1,892.7	1,179.9	777.2	777.6	783.9	1,697.3	379.1	8,026.0
1959	174.1	402.3	2,143.0	1,305.0	997.9	849.6	864.3	1,785.9	322.8	8,844.9
1960	174.9	413.1	2,158.0	1,348.2	1,052.6	881.7	904.6	1,787.4	342.4	9,062.9
1961	173.3	455.5	2,221.1	1,396.5	1,113.0	899.6	954.1	1,913.3	345.1	9,471.5
1962	179.5	505.3	2,467.1	1,501.8	1,202.3	950.1	1,040.1	2,038.9	342.5	10,227.6
1963	193.8	579.3	2,593.0	1,596.7	1,326.9	1,013.2	1,143.2	2,249.5	261.8	10,957.4
1964	196.8	635.9	2,836.6	1,762.5	1,425.6	1,081.9	1,261.0	2,483.1	341.5	12,024.9
1965	192.8	712.5	2,635.2	1,916.0	1,542.7	1,168.2	1,363.8	2,603.1	338.9	12,473.2
1966	201.6	753.1	3,357.0	2,057.8	1,685.6	1,258.6	1,493.5	2,981.0	293.7	14,081.9
1967	210.2	756.9	3,219.9	2,215.4	1,793.1	1,327.3	1,663.6	3,425.8	340.3	14,952.5
1968	225.3	831.8	3,924.2	2,471.9	1,960.7	1,423.6	1,830.0	3,804.8	322.2	16,794.5
1969	240.8	933.0	4,073.8	2,734.2	2,162.4	1,534.6	2,032.4	4,331.5	357.6	18,400.3
1970	325.8	1,025.8	4,163.6	2,951.7	2,329.5	1,682.0	2,240.9	4,726.9	368.1	19,814.3
1971	336.3	1,144.2	4,472.0	3,310.1	2,637.5	1,876.3	2,482.1	4,995.0	369.3	21,622.8
1972	384.6	1,318.9	5,228.2	3,690.6	2,976.5	2,126.5	2,792.1	5,524.4	453.7	24,495.5
1973	427.3	1,612.3	5,742.5	4,229.8	3,256.8	2,405.6	3,171.2	6,025.4	621.5	27,492.4
1974	682.8	1,740.4	6,286.5	4,627.8	3,554.6	2,562.1	3,615.5	6,611.1	597.3	30,278.1
1975	833.4	1,712.4	6,322.4	5,170.6	3,797.4	2,825.8	3,988.6	7,264.4	597.1	32,512.1
1976	704.7	1,872.9	7,855.2	5,815.7	4,289.9	3,245.5	4,722.4	7,810.5	566.7	36,883.5
1977	916.3	2,075.9	8,793.9	6,326.0	5,050.2	3,620.8	5,430.1	8,460.7	513.9	41,187.8
1978	927.9	2,311.6	9,640.3	7,056.4	5,582.1	4,001.0	6,292.2	9,280.9	758.5	45,850.9
1979	1,301.4	2,721.7	10,726.5	7,849.5	6,166.7	4,405.6	7,273.0	10,156.1	828.0	51,428.5

Source: Survey of Current Business, Vol. 59, No. 7 (July 1979), Tables 6.1 and 6.3 and the same numbered tables in the July 1976, 1977, and 1978 issues; unpublished tabulations and special information from the U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Wealth Division; Survey of Current Business, Vol. 60, No. 8 (August 1980), pp. 60, 66; unpublished tabulations of personal income by source, dated April 1980 from the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Measurements Division; U.,S. Department of Commerce, Bureau of the Census; Annual Survey of Manufacturers and Census of Manufacturers (selected editions), plus special information from the Bureau of the Census, U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Services, State Farm Income Statistics, January 1980, plus special information from ESCS.

a/ Other industries include agricultural services, forestry, and fisheries, plus "rest of the world," which includes operations of foreign governments and international organizations in the United States.

Table 2.
Virginia Gross State Product in Constant Dollars, 1958 - 1979 (millions of 1972 dollars)

	Mining	Construction	Mfg.	Trade	Finance, Insurance, & Real Estate	Trans. & Public Utilities	Services & Other Industries a/	Gov't	Farming	Total
1958	179.6	757.8	2,342.5	1,692.8	1,192.0	1,002.1	1,415.0	3,422.0	502.9	12,506.7
1959	200.8	811.1	2,597.6	1,840.6	1,482.8	1,085.1	1,508.4	3,522.5	458.5	13,507.4
1960	199.9	827.9	2,578.3	1,880.3	1,527.7	1,116.1	1,522.9	3,417.6	488.9	13,559.6
1961	197.4	893.1	2,644.2	1,923.6	1,610.7	1,121.7	1,569.2	3,466.1	496.0	13,922.0
1962	209.0	962.5	2,916.2	2,062.9	1,757.7	1,177.3	1,648.3	3,491.3	477.3	14,702.5
1963	231.0	1,066.9	3,135.4	2,178.3	1,832.7	1,254.0	1,766.9	3,712.0	375.9	15,553.1
1964	234.0	1,158.3	3,425.8	2,343.8	1,913.6	1,325.9	1,879.3	3,954.0	506.0	16,740.7
1965	235.1	1,250.0	3,155.9	2,524.4	2,051.5	1,433.4	1,956.7	4,080.1	468.7	17,155.8
1966	246.2	1,251.0	3,949.4	2,651.8	2,136.4	1,542.4	2,037.5	4,496.2	361.4	18,672.3
1967	252.6	1,213.0	3,696.8	2,731.7	2,205.5	1,593.4	2,171.8	4,852.4	461.7	19,178.9
1968	266.3	1,277.7	4,355.4	2,915.0	2,323.1	1,704.9	2,253.7	4,928.5	414.3	20,438.9
1969	278.7	1,245.7	4,418.4	3,031.3	2,477.0	1,780.3	2,352.3	5,237.6	426.9	21,248.2
1970	356.1	1,218.3	4,332.6	3,146.8	2,537.6	1,875.1	2,465.2	5,371.5	434.3	21,737.5
1971	366.3	1,245.0	4,517.2	3,381.1	2,736.0	1,964.7	2,572.1	5,371.0	431.5	22,584.9
1972	384.6	1,318.9	5,228.2	3,690.6	2,976.5	2,126.5	2,792.1	5,524.4	453.7	24,495.5
1973	382.9	1,455.1	5,586.1	4,005.5	3,134.6	2,365.4	3,011.6	5,589.4	391.6	25,922.2
1974	407.4	1,440.7	5,485.6	3,911.9	3,294.3	2,352.7	3,154.9	5,784.0	385.5	26,217.0
1975	411.4	1,260.0	5,001.9	3,974.3	3,265.2	2,390.7	3,118.5	5,949.5	442.1	25,813.6
1976	318.9	1,352.3	5,915.1	4,292.0	3,502.0	2,547.5	3,462.2	6,087.7	415.9	27,893.6
1977	377.5	1,407.4	6,281.4	4,464.4	3,881.8	2,688.0	3,686.4	6,202.9	394.9	29,384.7
1978	350.7	1,435.8	6,470.0	4,679.3	4,039.1	2,817.6	3,959.8	6,365.5	457.0	30,574.8
1979	392.6	1,489.7	6,767.5	4,792.1	4,152.7	2,908.0	4,038.3	6,489.5	425.6	31,456.0

Source: The sources cited in Table 1, plus Survey of Current Business, Vol. 59, No. 7 (July 1979), Table 7.15 and the same numbered table in the July 1976, 1977, and 1978 issues; U.S. Bureau of Labor Statistics, Handbook of Labor Statistics (selected issues); U.S. Bureau of the Census, Public Employment in 19__ (selected editions); U.S. Department of Agriculture, Economics, Statistics and Cooperatives Service, Agricultural Prices, Annual Summary, 1979 (June 1980), pp. 6, 16-19.

a/ Other industries include agricultural services, forestry, and fisheries, plus "rest of the world," which includes operations of foreign governments and international organizations in the United States.

Table 3.
Virginia GSP as a Percent of U.S. GNP by Industrial Division, 1958 - 1979 (current dollars)

	Mining	Construction	Mfg.	Trade	Finance, Insurance, & Real Estate	Trans. & Public Utilities	Services & Other Industries	Gov't	Farming	Total
1958	1.328	1.779	1.529	1.569	1.278	1.920	1.715	3.604	1.831	1.788
1959	1.415	1.764	1.522	1.588	1.514	1.944	1.732	3.572	1.690	1.818
1960	1.388	1.781	1.500	1.594	1.502	1.925	1.710	3.347	1.695	1.791
1961	1.365	1.898	1.545	1.614	1.510	1.898	1.686	3.374	1.708	1.810
1962	1.402	1.974	1.566	1.627	1.526	1.893	1.700	3.337	1.671	1.814
1963	1.491	2.122	1.559	1.655	1.593	1.915	1.753	3.414	1.277	1.843
1964	1.469	2.141	1.588	1.677	1.607	1.922	1.771	3.488	1.769	1.892
1965	1.428	2.179	1.342	1.699	1.615	1.928	1.764	3.394	1.540	1.813
1966	1.430	2.110	1.555	1.691	1.630	1.930	1.770	3.450	1.283	1.870
1967	1.440	2.029	1,455	1.700	1.617	1.938	1.785	3.557	1.532	1.878
1968	1.473	2.029	1.623	1.709	1.626	1.932	1.801	3.526	1.426	1.934
1969	1.496	2.028	1.600	1.738	1.660	1.913	1.815	3.696	1.419	1.967
1970	1.872	2.128	1.663	1.764	1.662	1.974	1.854	3.661	1.421	2.017
1971	1.967	2.175	1.709	1.812	1.703	2.020	1.883	3.545	1.333	2.033
1972	2.035	2.274	1.810	1.835	1.779	2.053	1.928	3.566	1.418	2.092
1973	1.997	2.492	1.784	1.890	1.831	2.101	1.941	3.619	1.241	2.104
1974	2.140	2.575	1.879	1.901	1.827	2.095	1.976	3.638	1.244	2.143
1975	2.170	2.529	1.806	1.927	1.790	2.106	1.990	3.616	1.214	2.127
1976	1.658	2.514	1.948	1.960	1.824	2.148	2.081	3.557	1.221	2.167
1977	1.901	2,486	1.928	1.958	1.886	2.151	2.100	3.566	1.044	2.168
1978	1.685	2.425	1.894	1.957	1.869	2.097	2.123	3.585	1.275	2.155
1979	1.852	2.511	1.923	1.969	1.865	2.080	2.159	3.621	1.180	2.171

Source: Same as Table 1.

Table 4.
Virginia GSP Per Capita and U.S. GNP Per Capita, 1958 - 1979 (current and 1972 dollars)

	Current Dollars			1972 Dollars		
	Virginia Per Capita	U.S. Per Capita	Virginia as a % of U.S.	Virginia Per Capita	U.S. Per Capita	Virginia as a % of U.S.
1958	$2,051	$2,578	80	$3,195	$3,902	82
1959	2,239	2,747	82	3,419	4,067	84
1960	2,274	2,812	81	3,412	4,094	83
1961	2,313	2,860	81	3,400	4,128	82
1962	2,447	3,036	81	3,517	4,303	82
1963	2,563	3,156	81	3,637	4,409	82
1964	2,760	3,327	83	3,842	4,577	84
1965	2,828	3,557	80	3,889	4,786	81
1966	3,160	3,852	82	4,190	5,018	83
1967	3,317	4,035	82	4,254	5,106	83
1968	3,685	4,358	85	4,484	5,278	85
1969	3,988	4,647	86	4,605	5,359	86
1970	4,252	4,820	88	4,665	5,276	88
1971	4,580	5,157	89	4,789	5,371	89
1972	5,130	5,624	91	5,130	5,624	91
1973	5,669	6,226	91	5,345	5,885	91
1974	6,167	6,684	92	5,340	5,761	93
1975	6,527	7,177	91	5,182	5,644	92
1976	7,301	7,929	92	5,521	5,930	93
1977	8,085	8,778	92	5,768	6,195	93
1978	8,857	9,749	91	5,906	6,412	92
1979	9,896	10,763	92	6,053	6,505	93